

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

6298383

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October 2, 2001

Integration of authentication authorization and accounting service and proxy service

**REISSUE:** October 2, 2003 - Reissue Application filed Ex. Gp.: 2152; Re. S.N. 10/679,203 (O.G. January 13, 2004)

**CERT-CORRECTION:** June 25, 2002 - a Certificate of Correction was issued for this patent (O.G. July 16, 2002)

**APPL-NO:** 225247 (09)

**FILED-DATE:** January 4, 1999

**GRANTED-DATE:** October 2, 2001

**ASSIGNEE-AT-ISSUE:** Cisco Technology, Inc., San Jose, California, 02

**ASSIGNEE-AFTER-ISSUE:** April 5, 1999 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., CISCO TECHNOLOGY, INC. 170 WEST TASMAN DRIVE SAN JOSE CALIFORNIA 95134, Reel and Frame Number: 009896/0727

April 9, 1999 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., CISCO TECHNOLOGY, INC. 170 WEST TASMAN DRIVE SAN JOSE CALIFORNIA 95134, Reel and Frame Number: 009896/0729

**ENGLISH-ABST:**

A single database maintained centrally hosts both proxy service data and authentication, authorization and accounting (AAA) data. Data is then copied to storage used locally by each system when both systems are instantiated. Therefore the ISP/Telco need not maintain two different data bases. A protocol gateway (PGW) is used to determine if the incoming user is a wholesale or retail user. The PGW filters the domain portion of the access request to locate a remote AAA service. If one such service is found, the PGW routes the communication via the proxy service to proxy it to the remote AAA service. The returned packet from the remote AAA service is then searched for an IP address to be assigned to the incoming user. If one is not found the PGW obtains a dynamically allocated IP address from a DHCP server (using an IP-Pool-ID if supplied in the returned packet from the remote AAA service). The same mechanism is used to forward accounting event packets from the NAS to the remote AAA server. The PGW may monitor more than one proxy and/or AAA service and load balance among them.

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1/1 PLUSPAT - (C) QUESTEL-ORBIT- image  
PN - US6298383 B1 20011002 [US6298383]  
TI - (B1) Integration of authentication authorization and accounting  
service and proxy service  
PA - (B1) CISCO TECH IND (US)  
PAO - Cisco Technology, Inc., San Jose CA (US)  
IN - (B1) SITARAMAN ARAVIND (US); SURYANARAYANAN KALPATHI S (US); GUTMAN  
ANDREW MARK (US); STHOTHRA BHASHAM SAMPATH KUMAR (US)  
AP - US22524799 19990104 [1999US-0225247]  
PR - US22524799 19990104 [1999US-0225247]  
IC - (B1) G06F-013/00  
EC - H04L-029/06C6C2  
PCL - ORIGINAL (O) : 709229000  
DT - Basic  
CT - US4763191; US4922486; US4962497; US5003595; US5241594; US5241599;  
US5351136; US5416842; US5423002; US5440635; US5560005; US5621721;  
US5655077; US5668857; US5671354; US5684950; US5717604; US5745556;  
US5768521; US5778182; US5809422; US5815665; US5835727; US5838683;  
US5845070; US5898780; US5905736; US5933625; US5944824; US5960409;  
US5970477; US5991810; US6011910; US6018619; US6021496; US6026440;  
US6035281; US6047376; US6052730; US6092196; US6119160; US6141687;  
EP0567217; WO953408  
- Bellovin, Steven M., "Problem Areas for the IP Security Protocols",  
Jul. 22-25, 1996, Proceedings of the Sixth Usenix UNIX Security  
Symposium, San Jose, CA.

Active Software, Inc., "Active Software's Integration System", printed  
from <http://www.activesw.com/products/products.html>, on Jul. 24, 1998.

Ascend Communications, Inc., "Access Control Product Information", 4  
pages, Undated.

Ascend Communications, Inc., "Remote Access Network Security", printed  
from <http://www.ascend.com/1103.html>, on Jul. 24, 1998, pp. 1-8.

Ascend Communications, Inc., "MultiVPN from Ascend Communications:  
Breaking Down the Barriers to VPNs", White Paper, 1998.

Bracho, Dr. Rafael, "Integrating the Corporate Computing Environment  
with Active Software", Nov. 18, 1998, Active Software, pp. 1-17.

Bracho, Dr. Rafael, "Mastering Corporate Computing with the ActiveWeb  
System", 1996, Active Software, Inc.

IBM, "IBM introduces new subscriber management system for Internet  
service providers", Dec. 2, 1998, IBM News, p. 1.

Rigney, et al., "Remote Authentication Dial in User Service (RADIUS)",  
Network Working Group, RFC 2138, Apr. 1997, pp. 1-57.

STG - (B1) U.S. Patent (no pre-grant pub.) after Jan. 2, 2001

AB - A single database maintained centrally hosts both proxy service data  
and authentication, authorization and accounting (AAA) data. Data is  
then copied to storage used locally by each system when both systems  
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the incoming user is a wholesale or retail user. The PGW filters the domain portion of the access request to locate a remote AAA service. If one such service is found, the PGW routes the communication via the proxy service to proxy it to the remote AAA service. The returned packet from the remote AAA service is then searched for an IP address to be assigned to the incoming user. If one is not found the PGW obtains a dynamically allocated IP address from a DHCP server (using an IP-Pool-ID if supplied in the returned packet from the remote AAA service). The same mechanism is used to forward accounting event packets from the NAS to the remote AAA server. The PGW may monitor more than one proxy and/or AAA service and load balance among them.

UP - 2001-41

1/1 LGST - (C) EPO  
PN - US6298383 B1 20011002 [US6298383]  
AP - US22524799 19990104 [1999US-0225247]  
ACT - 20020625 US/CC-A  
CERTIFICATE OF CORRECTION  
- 20040113 US/RF-A  
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EFFECTIVE DATE: 20031002  
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